CONTENTS OF *ANIMAL FEED SCIENCE AND TECHNOLOGY*, VOLUME 28

VOL. 28 NOS. 1–2 FEBRUARY 1990

Selenium supplements for grazing sheep. 1. A comparison between soluble salts and other forms of supplement
J.P. Langlands, G.E. Donald, J.E. Bowles and A.J. Smith (Armidale, N.S.W., Australia) 1
Selenium supplements for grazing sheep. 2. Effectiveness of intra-ruminal pellets
J.P. Langlands, J.E. Bowles, G.E. Donald and A.J. Smith (Armidale, N.S.W., Australia) 15
Utilization of an ensiled wet brewers' grains–corn mixture by growing lambs
F.D. McCarthy, S.A. Norton and W.H. McClure (Blacksburg, VA, U.S.A.) 29
Ensiling grass with straw. I. Effect of straw, cellulase enzyme and urea on chemical composition of grass and grass/legume silages
R.C. Jakhmola, J.R. Weddell and J.F.D. Greenhalgh (Aberdeen, Gt. Britain) 39
Feed intake, growth rate and digestibility coefficients of growing sheep fed hay supplemented with *Crotalaria ochroleuca*
S.V. Sarwatt (Morogoro, Tanzania) 51
Variation in lentil straw quality
W. Erskine, S. Rihawi (Aleppo, Syria) and B.S. Capper (London, Gt. Britain) 61
Ileal and faecal energy digestibility coefficients of full-fat canola seed for swine
J. Shaw, S.K. Baidoo and F.X. Aherne (Edmonton, Alb., Canada) 71
Variability in the nutritive value of straw cultivars of wheat, rye and triticale and response to urea treatment
A.A. Dias-da-Silva and C.V.M. Guedes (Vila Real, Portugal) 79
Nutritive value of some tropical feedstuffs for pigs. Chemical composition, digestibility and metabolizable energy content
F.P. Lekule, H. Jørgensen, J.A. Fernández and A. Just (Tjele, Denmark) 91
Within- and between-centre variability in the measurement of organic matter digestibility in vivo of cereal straws
D.I. Givens (Stratford-upon-Avon, Gt. Britain), P.J.S. Dewey (Aberdeen, Gt. Britain), E. Donaldson (Edinburgh, Gt. Britain), D.I.H. Jones (Aberystwyth, Gt. Britain) and A.H. Adamson (Bristol, Gt. Britain) 103
Construction and operation of an open-circuit ventilated hood system for cattle nourished wholly by intragastric infusion of nutrients
J.K. Ku-Vera, N.A. MacLeod and E.R. Ørskov (Aberdeen, Gt. Britain) 109
Prediction of the organic matter digestibility of grass silage
G.D. Barber, M.S. Kridis, N.W. Offer (Ayr, Gt. Britain), D.I. Givens (Stratford-upon-Avon, Gt. Britain) and I. Murray (Aberdeen, Gt. Britain) 115
Utilization of ammoniated wheat straw given in a feed block and supplemented with varying quantities of fish meal and oil-extracted rice bran
U.B. Singh and U.R. Mehra (Izatnagar, India) 129
Faecal and urinary excretion of iron, copper, zinc and manganese in faunated and defaunated wethers fed semi-purified diets of different carbohydrate composition
M. Kreuzer and M. Kirchgessner (Freising, F.R.G.) 135

The effect of pyromellitic diimide upon the rumen fermentation of sheep fed a forage diet
A.F.M.M. Eijssen, T.N. Barry and I.M. Brookes (Palmerston North, New Zealand) 145
The use of dried sugar cane fractions as the principal energy source in sheep rations
N.P. McMeniman, R. Elliott (St. Lucia, Qld., Australia) and M. O'Sullivan (Brisbane, Qld.,Australia) 155
The use of mixtures of ammonium salts with lime for upgrading cereal straws
V.C. Mason, J.E. Cook, A.S. Keene and R.D. Hartley (Maidenhead, Gt. Britain) 169

VOL. 28 NOS. 3–4 APRIL 1990

Effects of the ionophore antibiotics monensin, monensin-propionate, abierixin and calcimycin on ruminal fermentations in vitro (Rusitec)
C. Bogaert, G. Jeminet (Aubière, France) and J.P. Jouany (Ceyrat, France) 183
Performance of broiler chicks fed on low and high oil fish silages in relation to changes taking place in lipid and protein components
D.H. Machin, S. Panigrahi, J. Bainton (Chatham, Gt. Britain) and T.R. Morris (Reading, Gt. Britain) 199
The effect of supplementation with leaves from the leguminous trees *Sesbania grandiflora, Albizia chinensis* and *Gliricidia sepium* on the intake and digestibility of guinea grass hay by goats
A.J. Ash (Apia, Western Samoa) 225
Effect of pelleting mixed feeds on phytase activity and the apparent absorbability of phosphorus and calcium in pigs
A.W. Jongbloed and P.A. Kemme (Lelystad, The Netherlands) 233
Influence of germination of cereals on viscosity of their aqueous extracts and nutritive value
A.I. Fengler, F.X. Aherne and A.R. Robblee (Edmonton, Alb., Canada) 243
Seasonal trends in forage dry matter production of some improved pastures and animal performance in relation to chemical composition in Malawi
B.H. Dzowela (Nairobi, Kenya), M.S.L. Kumwenda, H.D.C. Msiska (Lilongwe, Malawi), E.M. Hodges and R.C. Gray (Gainesville, FL, U.S.A.) 255
Evaluation of *Solanum laciniatum* press-cake silage as roughage for growing–finishing cattle
V. González, E. Fernández and C. Cosín (Madrid, Spain) 267
The nutritive value for ruminants of tagasaste (*Chamaecytisus palmensis*), a leguminous tree
F.M.P. Borens and D.P. Poppi (Canterbury, New Zealand) 275
Determination of cell wall carbohydrates in forages by near infrared reflectance spectroscopy
T.E. Fairbrother and G.E. Brink (Mississippi State, MS, U.S.A.) 293
The effect of two heat treatments (steam flaking and extrusion) on the digestion of *Pisum sativum* in the stomachs of heifers
M. Focant, A. van Hoecke and M. Vanbelle (Louvain-la-Neuve, Belgium) 303
The effect of moulds on the nutritional value of wheat
J. Bláha (Suchdol, Czechoslovakia), E. Jíčínská, R. Jelínek (Praha, Czechoslovakia) and D. Vesely (O. horách, Czechoslovakia) 315
Nutritive value of canola seed for young pigs
J. Shaw, S.K. Baidoo and F.X. Aherne (Edmonton, Alb., Canada) 325

Influence of anhydrous ammonia and bacterial preparations on alfalfa forage baled at various moisture levels. I. Nutrient Composition and utilization K.M. Wittenberg and S.A. Moshtaghi-Nia (Winnipeg, Man., Canada) 333

Book Reviews
Dairy-cattle production 345
Designing foods 346
Energy metabolism 348
Ruminant nutrition 350

Announcement 353

Author Index 355